

AMENDMENTS TO THE CLAIMS:

Please amend the claims by canceling claims 1-41, without prejudice and adding new claims 42 and 43, as indicated on the following listing of all the claims in the present application after this Amendment:

LISTING OF THE CLAIMS:

(Claims 1-41 are cancelled)

42.(New) A non-volatile semiconductor memory device, comprising:  
a memory array including a plurality of multi-level-cell memory cells, each memory cell comprising a storage element having a capacity to store  $N$  bits of logical data,  
where  $N \geq 2$ , and each memory cell configured for  $2^N$  distinct data storage levels, each of the  $2^N$  data storage levels representative of a discrete  $N$ -bit combination of logical data; and  
a staircase program-verify circuit for providing a staircase program-verify pulse electrically coupled to the memory array and capable of concurrently program-verifying the plurality of multi-level-cell memory cells and inhibiting programming of a memory cell programmed to substantially within a selected data storage level.

43.(New) The device of claim 42, wherein the storage element comprises a semiconductor transistor having a programmable threshold voltage,  $V_t$ , within a continuous range from a lowest  $V_t$  value to a highest  $V_t$  value, the continuous range having  $2^N$  distinct data storage levels including an erased level and  $2^N-1$  program levels, the  $2^N-1$  program levels including a lowest program level, at least one intermediate program level, and a highest program level.